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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,106	12/26/2000	Takashi Kinouchi	6715/60750	3130
7590	03/08/2004			EXAMINER CHU, KIM KWOK
Jay H Maioli Cooper & Dunham 1185 Avenue of the Americas New York, NY 10036			ART UNIT 2653	PAPER NUMBER

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/674,106	KINOUCHI, TAKASHI
	Examiner Kim-Kwok CHU	Art Unit 2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on Amendment filed on 12/19/03 (paper 8).

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. PCT/JP00/01040.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

***Response to Remarks***

1. Applicant's Remarks (paper 8) filed on December 19, 2003 have been fully considered but they are not persuasive.

(a) Applicant states that the prior art of Sharples does not teach the amended feature "hard disk" (page 12 of the Remarks, line 13). Accordingly, Sharples teaches a processing unit 42 which includes a hard disk storage means (Fig. 5; column 17, lines 4-23); and

(b) Applicant states that the prior art of Sharples, Jr. does not disclose recording on a second recording medium "at the known recording rate of the second recording medium" (page 12 of the Remarks, lines 18-20). Accordingly, Sharples, Jr's recording medium 40 records at a known recording rate, for example, the recording rate of the tape drive 40.

***Claim Objections***

2. Claims 1, 4, 16 and 20 are objected to because of the following informalities:

(a) in claim 1, line 5, the term "predetermined standard read out rate" should be changed to --predetermined read out rate--;

(b) in claim 4, lines 3 and 4, the term "said second recording unit" should be changed to --said recording unit--;

(c) in claim 16, last line, the term "said second

recording unit" should be changed to --said recording unit--;  
and

(d) in claim 20, last line, the term "said second  
recording unit" should be changed to --said recording unit--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs  
of 35 U.S.C. § 102 that form the basis for the rejections under  
this section made in this Office action:

*A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a  
printed publication in this or a foreign country or in  
public use or on sale in this country, more than one  
year prior to the date of the application for patent  
in the United States.*

4. Claims 1-4 are rejected under 35 U.S.C. § 102(b) as being  
anticipated by Sharples, Jr. et al. (U.S. Patent 4,811,325).

Sharples, Jr. teaches a recording and/or reproducing  
apparatus having all the elements and means as recited in  
claims 1-4. For example, Sharples, Jr. teaches the following:

(a) as in claim 1, a reproducing unit 34 for reading out  
data from a first recording medium 30 at a transmission rate  
higher than a predetermined read out rate of the first  
recording medium 30 (Fig. 5; column 11, lines 39-50);

(b) as in claim 1, storage unit 42 for storing data read  
out by the reproducing unit 34 and the storage unit 40 and 42

includes a hard disk drive (Fig. 5; the processing system 42 includes a disk storage means);

(c) as in claim 1, recording unit 40 for recording data read out from the storage unit 42 in a second recording medium 40 (Fig. 5; column 16, lines 51-61);

(d) as in claim 1, a controlling unit 42 for controlling respective operations of the reproducing unit 34, the storage unit 38, 42 and the recording unit 40 (Fig. 5; column 16, lines 51-61);

(e) as in claim 1, the controlling unit 42 causing the data from the reproducing unit 34 to be written in the storage unit 40 and 42 at a transmission rate higher than a predetermined recording rate of the second recording medium 40 (Fig. 5; column 10, lines 58 and 59);

(f) as in claim 1, the controlling unit 42 causing the data to be read out from the storage unit 42 at a transmission rate equal to the predetermined recording rate for the second recording medium 40 (Fig. 5, the second recording medium is recorded in a standard format/rate);

(g) as in claim 1, the controlling unit 42 for routing the read-out data to the recording unit 40 and causing the routed read-out data to be recorded in the second recording medium 40 at the predetermined recording rate for the second recording medium (Fig. 5);

(h) as in claim 2, when the reading out operation of the reproducing unit 34 comes to a close, the controlling unit 42 causes the read-out data to be recorded on the second recording medium 40 by the recording unit 40 (Fig. 5; data recording starts when the reading process is completed);

(i) as in claim 3, when the reading out operation from the first recording medium 30 by the reproducing unit 34 comes to a close, the controlling unit 42 causes the read-out data to be recorded on the second recording medium 40 (Fig. 5; data recording starts when the reading process is completed); and

(j) as in claim 4, the controlling unit 42 halts the recording by the recording unit 40 when the second recording medium 40 is not loaded on the recording unit and a time is a starting time (Fig. 5; inherent feature where a recording operation fails/stops if there is no recording medium to record data).

5. Claims 13-16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sharples, Jr. et al. (U.S. Patent 4,811,325).

Sharples, Jr. teaches a recording and/or reproducing apparatus having all the elements and means as recited in claims 13-16. For example, Sharples teaches the following:

- (a) as in claim 13, a reproducing unit 34 for reading out data from a first recording medium 30 at a transmission rate higher than a predetermined readout rate of the first recording medium (Fig. 5; column 11, lines 39-50);
- (b) as in claim 13, a data storage unit 38 and 42 for storing data read out by the reproducing unit 34 and the storage unit includes a hard disk (Fig. 5; the processing system 42 includes a disk storage means);
- (c) as in claim 13, a recording unit 40 for storing data read out from the storage unit 42 in a second recording medium 40 (Fig. 5);
- (d) as in claim 13, a controlling unit 42 for controlling respective operations of the reproducing unit 34, the data storage unit 38, 42 and the recording unit 40 (Fig. 5; column 16, lines 51-61);
- (e) as in claim 13, the controlling unit 42 causing data to be read out from the data storage unit 38 and 42 at a

transmission rate equal to a predetermined recording rate for the second recording medium (Fig. 5);

(f) as in claim 13, the data to be read out from the data storage unit 42 is supplied to the recording unit 40 for recording at the predetermined recording rate for the second recording medium, after all of the data read out from the first recording medium is stored in the data storage unit (Fig. 5; column 3, lines 57-65; column 14, lines 14-26);

(g) as in claim 14, the controlling unit 42 causes the data to be read out from the storage unit 38 and 42 and routed to the recording unit 40 (Fig. 5, the second recording medium is recorded in a standard format/rate);

(h) as in claim 14, when the reading out operation of the first recording medium 30 by the reproducing unit 34 comes to a close, the controlling unit 42 causes the read-out data to be recorded on the second recording medium 40 by the recording unit (Fig. 5; data recording starts when the reading process is completed);

(i) as in claim 15, the controlling unit 42 causes data to be read out from the storage unit 38 and 42 and when the reproducing operation for the first recording medium 30 by the reproducing unit 34 comes to a close, the controlling unit 42 causes the read-out data to be recorded on the second recording

medium (Fig. 5; data recording starts when the reading process is completed); and

(j) as in claim 16, when a time is a starting time and the second recording medium is not loaded on the recording unit 40, the controlling unit 42 halts the recording operation of the recording unit 40 (Fig. 5; inherent feature where a recording operation fails if there is no recording medium to record data).

6. Claims 19 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sharples, Jr. et al. (U.S. Patent 4,811,325).

Sharples, Jr. teaches a method for acquiring data from an optical disc having all the means and steps as recited in claims 19 and 20. For example, Sharples, Jr. teaches the following:

(a) as in claim 19, a reproducing unit 34 for reading out data from a first recording medium 30 at a transmission rate faster than a readout rate of the first recording medium (Fig. 5; column 11, lines 28-50 and lines 39-50);

(b) as in claim 19, a data storage unit 38 and 42 for storing data read out from the reproducing unit, the storage unit includes a hard disk, (Fig. 5; the processing system 42 includes a disk storage means);

(c) as in claim 19, a recording unit 40 for recording the data read out from the data storage unit 38 and 42 in a second recording medium 40 (Fig. 5);

(d) as in claim 19, a controlling unit 42 for controlling the reproducing unit 34, the data storage unit 42 and the recording unit 40 in a second recording medium (Fig. 5);

(e) as in claim 19, the controlling unit 42 operating so that when a data recording starting time point is previously set on the second recording medium 40 (Fig. 5: the second recording unit is ready for recording);

(f) as in claim 19, data is read out from the data storage unit 38 and 42 at a transmission rate equal to a predetermined recording rate for the recording medium and routed to the recording unit 40 when a time is the recording starting time point, with the read-out data being recorded on the second recording medium 40 at the predetermined recording rate for the second recording medium (Fig. 5; column 16, lines 50-68; any request of transferring or queuing of information from the reproducing unit is considered as a data recording starting time point); and

(g) as in claim 20, when the second recording medium 40 is not loaded on the recording unit 40 and the time is the recording starting time point, the controlling unit halts the recording operation of the recording unit (Fig. 5; inherent

feature where a recording operation fails if there is no recording medium to record data).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

8. Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharples, Jr. et al. (U.S. Patent 4,811,325) in view of Inoue (U.S. Patent 6,137,642).

Sharples teaches a recording and/or reproducing apparatus very similar to that of the instant invention. For example, Sharples, Jr. teaches the following:

- (a) as in claims 5 and 17, the storage unit 42 includes a data processing unit 42 (Fig. 5);
- (b) as in claims 5 and 17, the data processing unit 42 including a decoding unit 34 for decoding data when reading out the data from the reproducing unit 34 (Fig. 5);

(c) as in claims 6 and 18, the data processing unit is controlled by the controlling unit so that data read out from the data storage unit is decoded and read out at the transmission rate equal to the predetermined recording rate from the second recording medium (Fig. 5).

However, Sharples, Jr. does not teach the following:

(a) as in claims 5 and 17, the data processing unit including an encoding unit for encoding data from the reproducing unit 34 when writing data readout from the reproducing unit.

Inoue teaches the following:

(a) a recording unit 3 including an encoding unit 8 for encoding data (Fig. 1);

A user of Sharples, Jr.'s data transfer system needs data encoding means if he chooses an optical recording medium such as Inoue's to record the transferred data instead of Sharples, Jr.'s tape. Hence, for the advantage of a high data access rate, it would have been obvious to one of ordinary skill in the art at the time of the invention to add encoding means such as Inoue's to Sharples, Jr.'s data processing system, because the additional encoding means allows an end user to record the transferred data in an optical medium instead of a tape.

9. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharples, Jr. et al. (U.S. Patent 4,811,325) in view of Inoue (U.S. Patent 6,137,642).

Sharples, Jr. teaches a recording and/or reproducing apparatus very similar to that of the instant invention. For example, Sharples teaches the following:

(a) as in claim 7, a reproducing unit 34 including a decoding processing unit 36 for decoding data read out from a first recording medium 30 at a transmission rate faster than a predetermined readout rate for the first recording medium and for outputting a playback signal (Fig. 5; column 11, lines 39-50);

(b) as in claim 7, a first controlling unit 52 for controlling the decoding processing unit (Fig. 5; clock circuit is needed to control/operate the decoder 36);

(c) as in claim 7, a storage unit 38 and 42 for storing data read out from the first recording medium 30, the storage unit includes a hard disk drive (Fig. 5);

(d) as in claim 7, a recording unit 40 for recording data read out from the storage unit 38 and 42 (Figs. 5 and 8);

(e) as in claim 7, the recording unit 40 storing output data in a second recording medium 40 (Fig. 5);

(f) as in claim 7, a third controlling unit 42 for supplying a control signal to the first controlling unit to

control operation of the reproducing unit and operation of the recording unit (Fig. 5, control unit 42 controls all other controllers);

(g) as in claim 7, the third controlling unit 42 supplying a control signal to the storage unit 38 and 42 to read out data from the storage unit at a transmission rate equal to a predetermined recording rate of the second recording medium;

(h) as in claim 7, the third controlling unit 42 sending a control signal to cause data supplied to be recorded on the second recording medium 40 at a predetermined recording rate for the second recording medium (Fig. 5);

(i) as in claim 8, the third controlling unit 42 causes data to be read out from the storage unit 38 and 42 after an end of the reproducing operation of the first recording medium 30 by the reproducing unit 34 to route the read-out data to the recording unit 40 (Fig. 5);

(j) as in claim 8, the read-out data being recorded by the recording unit 40 on the second recording medium (Fig. 5);

(k) as in claim 9, when the data recording start time point is previously set in the second recording medium 40, the third controlling unit 42 causes data to be read out from the storage unit 38 and 42 when the time is at the data recording start time point to route the read-out data to the recording

unit to cause the read-out data to be recorded on the second recording medium (Fig. 5; standard recording procedure where a starting time is previously set before the recording operation);

(l) as in claim 10, when the second recording medium 40 is not loaded on the recording unit and the time is the data recording start time point, the third controlling unit 42 halts the recording operation of the second recording medium (Fig. 5; inherent feature where a recording operation fails/stops if there is no recording medium to record data); and

(m) as in claim 12, the data is read out at a transmission rate equal to the predetermined recording rate of the second recording medium (Fig. 5, the second recording medium is recorded in a standard format/rate).

However, Sharples, Jr. does not teach the following:

(a) as in claim 7, the recording unit 40 including an encoding unit for encoding data;

(b) as in claim 7, a second controlling unit for controlling the encoding unit;

(c) as in claim 11, the storage unit includes a data processing unit for applying further encoding and for storing data from the reproducing unit in the storage unit when writing data read out from the reproducing unit and for applying further decoding, as a counterpart of said encoding by said

data processing unit, when reading out the data, and a data storage unit for storing data from the data processing unit; and

(d) as in claim 12, the data processing unit is controlled by the third controlling unit so that data read out from the data storage unit is processed with the further decoding.

Inoue teaches the following:

(a) a recording unit 3 including an encoding unit 8 for encoding data (Fig. 1);

(b) a second controlling unit 11 for controlling the encoding unit (Fig. 1);

(c) as in claim 11, a storage unit 13 includes a data processing unit 8 for applying further encoding and for storing data from a reproducing unit 32 in the storage unit 13 when writing data read out from the reproducing unit 32 and for applying further decoding, as a counterpart of the encoding by the data processing unit, when reading out the data (Fig. 1);

(d) as in claim 11, a data storage unit for storing data from the data processing unit (Fig. 1; encoder/decoder inherently includes storage means such as registers or buffers for data processing); and

(e) the data processing unit is controlled by a third controlling unit 11 so that data read out from the data storage unit is processed with the further decoding (Fig. 1).

A user of Sharples's data transfer system needs data encoding means if he chooses an optical recording medium such as Inoue's to record the transferred data instead of Sharples, Jr.'s tape. Hence, for the advantage of a high data access rate, it would have been obvious to one of ordinary skill in the art at the time of the invention to add encoding means such as Inoue's to Sharples, Jr.'s data processing system, because the additional encoding means allows an end user to record the transferred data in an optical medium instead of a tape.

Furthermore, it would have been obvious to one of ordinary skill in the art to add a control means and data processing means similar to Inoue's system controller 11 and encoder 8 to Sharples, Jr.'s data processing system, because the additional controller and signal processor can perform encoding operation under the user's order.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.  
20231 Or faxed to:

(703) 872-9314 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

Kim-Kwok CHU  
Examiner AU2653  
March 5, 2004

(703) 305-3032

fc 3/5/04

  
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